

**ABSTRACT OF THE DISCLOSURE**

The present invention discloses an apparatus for controlling a layer jump process of an optical drive. The layer jump control apparatus has a pick up head having a lens and a voice coil motor, a preamplifier for producing a focusing error signal, a controller for receiving the focusing error signal and producing a focusing control signal, a low pass filter for receiving the focusing control signal and producing a layer distance balancing signal, and a driving device to send a driving force to the pick up head. When the optical drive does not perform the layer jump process, the driving device receives the focusing control signal to determine the driving force; and when the optical drive performs the layer jump process, the driving device receives a kicking signal and the layer distance balancing signal to determine the driving force when the optical drive performs the kicking process; the driving device receives a braking signal and the layer distance balancing signal to determine the driving force when the optical drive performs the braking process; and the driving device receives the layer distance balancing signal to determine the driving force when the optical drive performs the holding process and the waiting process.